### **BEFORE THE**

# Federal Communications Commission WASHINGTON, D.C. 20554

In the Matter of	)	
LightSquared Subsidiary LLC	)	RM-11683
·	)	
Petition for Rulemaking Concerning the Development	)	
Of Operating Parameters for Terrestrial Use of the	)	
1526-1536 MHz Portion of the L-Band	)	

To: The Commission

## **COMMENTS OF THE U.S. GPS INDUSTRY COUNCIL**

The U.S. GPS Industry Council (the "Council"), by its counsel and pursuant to Section 1.405(a) of the Commission's Rules (47 C.F.R. § 1.405(a)), hereby comments upon the Petition for Rulemaking filed on September 28, 2012 by LightSquared Subsidiary LLC ("LightSquared"). In the Petition, LightSquared asks the Commission to initiate a rulemaking proceeding to amend the Commission's rules to reflect "operating parameters for terrestrial use of the 1526-1536 MHz portion of the L-Band . . . ." It seeks rules that would, "for a transition period, allow terrestrial use of the lower 10 MHz of LightSquared's L-Band downlink spectrum at 1526-36 MHz in a manner to ensure further compatibility with GPS receivers[,]" and "establish a timetable that, based explicitly on the record in this proceeding, would ultimately permit LightSquared robust commercial terrestrial use of this band." LightSquared's request is

<sup>&</sup>lt;sup>1</sup> See Public Notice, Report No. 2968 (released November 16, 2012) (inviting statements opposing or supporting the above-captioned petition for rulemaking).

<sup>&</sup>lt;sup>2</sup> See LightSquared Subsidiary LLC Petition for Rulemaking Concerning the Development of Operating Parameters for Terrestrial Use of the 1526-1536 MHz Portion of the L-Band, RM-11683, at 1 (filed September 28, 2012)("LightSquared Petition").

connected to and fundamentally contingent upon a separate Petition for Rulemaking covering the 1675-1680 MHz band on which the Council recently filed comments.<sup>3</sup>

## I. INTRODUCTION

The Council's interest in this and related proceedings is well known to the Commission. LightSquared's proposals here and elsewhere remain premised, in part, on access to L-band Mobile-Satellite Service ("MSS") spectrum in the 1525-1559 MHz band immediately adjacent to the Global Positioning System ("GPS") L1 band at 1559-1610 MHz. LightSquared seeks ultimately to offer a co-primary high-power terrestrial mobile service in the 1525-1535 MHz segment of that band. The Council's participation arises from the strong interest of its members in maintaining a stable operating environment that sustains the fundamental utility of this band in order to enable the critical positioning, navigation, timing (PNT), safety-of-life, and public safety applications and innovation on which millions of users depend.<sup>4</sup>

The expansion of wireless broadband services promises economic and social benefits that are important to the public interest. Nevertheless, the Council strongly believes that such expansion must be technically compatible with GPS, a unique national system having no practical alternative that is embedded in, and critical to, U.S. industry, economic competitiveness and the daily lives of millions of Americans. The Council further maintains that proposals for rule changes related to expanded broadband services must include sufficient information and

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<sup>&</sup>lt;sup>3</sup> Comments of the U.S. GPS Industry Council in RM-11681 (filed December 10, 2012). *See also* Public Notice, Report No. 2967 (released November 9, 2012) (inviting statements opposing the LightSquared Subsidiary LLC Petition for Rulemaking to Allocate the 1675-1680 MHz Band for Terrestrial Mobile Use, RM-11681, filed November 2, 2012).

<sup>&</sup>lt;sup>4</sup> In considering proposed spectrum changes, the Council reminds the Commission that there are fundamental differences between a communications service and a position, navigation and timing ("PNT") service, such as GPS. Changes in spectrum use that increase interference to GPS affect the accurate positioning that GPS provides, and therefore jeopardize its essential function.

analyses for the Commission and other interested parties to meaningfully consider those proposals.

LightSquared's ultimate objective, as set forth in its Petition, is to provide itself with sufficient spectrum to offer terrestrial mobile broadband capacity using a combination of uplink bands at 1627.5-1637.5 MHz and 1646.7-1656.7 MHz, coupled with two ten megahertz downlink bands at 1670-1680 MHz and 1526-1536 MHz. This proposal includes multiple interconnected initiatives, including a separate petition for rulemaking dealing with the 1675-1680 MHz band and an associated modification of license application,<sup>5</sup> through which LightSquared seeks to arrive at "a comprehensive solution that would permit LightSquared to commence operation of its new, competitive terrestrial broadband network, while also addressing issues raised by the GPS industry."6

#### II. **DISCUSSION**

A. LightSquared's Petition Does Not Contain a Technical Proposal for Protecting Existing and Future GPS Users.

LightSquared did not include any engineering showing or technical exhibit to demonstrate the viability of its proposal or conditions of use, nor did it propose rules under which the MSS spectrum would be used to provide terrestrial mobile service. The Commission should, therefore, require LightSquared to make detailed showings in support of its request.

<sup>&</sup>lt;sup>5</sup> See LightSquared Subsidiary LLC Petition for Rulemaking to Allocate the 1675-1680 MHz Band for Terrestrial Mobile Use, RM-11681, filed November 2, 2012 ("RM-11681 Petition"). As noted, the Council commented on the RM-11681 Petition on December 10, 2012. See also Application of LightSquared Subsidiary LLC, File Nos. SAT-MOD-20120928-00160, et. seq. ("LightSquared Modification Application), and FCC Public Notice, "Federal Communications Commission Invites Comment on LightSquared Request to Modify its ATC Authorization," Report No. SPB-245 (released November 16, 2012).

<sup>&</sup>lt;sup>6</sup> RM-11681 Petition at 2.

LightSquared's statement that it intends not to use the lower 10 MHz channel of the 1525-1559 MHz band (i.e., 1526-1536 MHz) until GPS protection issues are worked out must be reconciled with the conclusion reached last year by the Technical Working Group ("TWG") tasked by the Commission to determine the feasibility of introducing a new allocation to allow terrestrial mobile broadband service in the 1525-1559 MHz band, that the same lower 10 MHz channel cannot be used without causing harmful interference to GPS. LightSquared's Petition does not propose how a different outcome than that which the Commission proposed in February 2012 in response to the NTIA Letter is feasible. Indeed, the LightSquared Petition does not articulate a rationale for determining that the TWG conclusion that covers the 1526-1536 MHz band should be overturned or even revisited. LightSquared must, therefore, provide analysis sufficient to demonstrate how its proposed operations could be successfully implemented, and that its proposal will not increase the potential for harmful interference to existing spectrum.

<sup>&</sup>lt;sup>7</sup> There is a Commission proceeding already underway to address LightSquared's conditional L-band ATC authority in light of the Report of the TWG and other testing results (including use of the lower 10 MHz band). The suggested use of the 1526-1536 MHz band contradicts conclusions reached by NTIA and supported in the findings in IB Dkt. 11-109. In that proceeding, the FCC's International Bureau (the "Bureau") has proposed two actions based on a February 14, 2012 NTIA letter, in which NTIA concluded that "LightSquared's proposed mobile broadband network will impact GPS services and there is currently no practical way to mitigate the potential harmful interference from LightSquared's planned terrestrial operations in the 1525-1559 MHz band." See Letter from Lawrence E. Strickling, Assistant Secretary for Communications and Information, U.S. Dept. of Commerce, to Julius Genachowski, Chairman, FCC (dated Feb. 14, 2012) ("NTIA Letter"). First, the Bureau proposed to vacate the portion of its January 26, 2011 Conditional Waiver Order that provisionally allowed LightSquared to initiate L-band terrestrial mobile broadband service at 1525-1559 MHz, provided that it was first able to demonstrate that no harmful interference would be caused to GPS receivers operating in the neighboring band at 1559-1610 MHz. Second, the Bureau proposed to modify LightSquared's license to suspend indefinitely LightSquared's underlying Mobile-Satellite Service ("MSS") Ancillary Terrestrial Component ("ATC") authorization "to an extent consistent with the NTIA Letter." See FCC Public Notice, "International Bureau Invited Comment on NTIA Letter Regarding LightSquared Conditional Waiver," DA 12-214, IB Docket No. 11-109, released February 15, 2012.

<sup>&</sup>lt;sup>8</sup> See, e.g., Starkey Laboratories, Inc., 27 FCC Rcd 5805, 5808 (¶ 7) (OET 2012) (dismissing Petition for Rulemaking because the petitioner "has not provided any analysis to demonstrate that its proposal will not increase the potential for interference to licensed users").

The Council is not saying that LightSquared can never meet the threshold requirement for Commission consideration of rulemaking petitions. However, without a technical demonstration – and along with that a plan for how to protect existing GPS receivers that will continue to be utilized in myriad government, commercial, industrial, and civil applications for many years – the Council maintains that LightSquared's Petition is presently deficient, and the Commission should require LightSquared to make detailed showings in support of its request.

## B. Public Interest Considerations Must Be Weighed Carefully in Considering LightSquared's Proposal.

The allocation of additional spectrum for provision of broadband service is a national objective, but it cannot be advanced asymmetrically with the overarching spectrum management scheme (both domestically and internationally), or fail to take into account the equally important national space policy goals of the United States. Mobile broadband and GPS are complementary. Nevertheless, it has yet to be shown that the introduction of a new allocation to support mobile terrestrial broadband at 1526-1536 MHz can be achieved in a way that will enable LightSquared's interest in having the Commission ". . . ultimately permit LightSquared robust commercial terrestrial use of this band."

<sup>&</sup>lt;sup>9</sup> See 47 C.F.R. § 1.401(e) ("Petitions [for rulemaking] which are moot, premature, repetitive, frivolous, or which plainly do not warrant consideration by the Commission may be denied or dismissed without prejudice to the petitioner").

<sup>&</sup>lt;sup>10</sup> LightSquared Petition at 1.

## III. CONCLUSION

For all of the forgoing reasons, the Council respectfully urges the Commission require LightSquared to make a technical demonstration that provides a basis for rulemaking action in the face of the contrary TWG conclusions now before the Commission.

Respectfully submitted,

U.S. GPS INDUSTRY COUNCIL

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December 17, 2012

Its Attorneys

## **CERTIFICATE OF SERVICE**

I, Deborah Morris, hereby certify that on this 17<sup>th</sup> day of December, 2012, a copy of the foregoing Comments of the U.S. GPS Industry Council was provided by first-class U.S. Mail, postage prepaid, to the following:

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